IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: DeWolf et al.

Serial No: 10/009,219

Filed: November 7, 2001

For: Methods of Using Fab I and Compounds

Modulating Fab I Activity

Atty Docket No.: IPT-061.01

Art Unit: 1652

Examiner: Steadman, David J.

CERTIFICATE	OF HAND DELIVERY							
	I hereby certify that this Information Disclosure Statement is being submitted by hand delivery to David J. Steadman, Patent and Trademark Office, Technology Center 1600, Crystal Mall 1, 7 th Floor, 1911 S. Clark Place, Arlington, VA 22202 on the date set forth below.							
October , 2003 Date of Signature and Hand Delivery	By: Name:							

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

<u>INFORMATION DISCLOSURE STATEMENT</u> <u>UNDER 37 CFR § 1.97 (b)(3)</u>

Sir:

Submitted herewith on Form PTO-1449 is a list of publications known to Applicants and/or their Attorney/Agent in compliance with the requirement of 37 C.F.R § § 1.56 and 1.97(c). A copy of each publicly available document is also being submitted herewith. At least three documents cited on accompanying Form 1449 contain sequence listings and/or large tables that are more than 50 pages in length. Applicants have submitted paper copies of these documents that do not include these large tables and/or listings. Following 37 C.F.R. 1.52 (e), Applicants have further submitted herewith, on compact disk, the entirety of documents WO 97/30070 (990 pages), EP 0786519 (3,271 pages) and US Patent No. 6,380,370 (267 pages). If the Examiner wishes to have full paper copies of these documents, the Examiner should contact the Attorney or Agent of record.

Applicants have cited for the Examiner's consideration certain issued U.S. patents and copending U.S. patent applications that are owned at least in part by the assignee of this application, that describe subject matter related to the present invention. The co-pending applications are listed herewith in accordance with M.P.E.P. 609 III.D which states: "Applicants may wish to list U.S. patent application numbers on other than Form PTO-1449 or PTO/SB/08A and 08B format to avoid the application numbers of pending applications being published on the patent. If a citation is not printed on the patent but has been considered by the examiner in accordance with this section, the patented file will reflect that fact as noted in subsection III.C(2) above."

No copies of the co-pending applications have been provided. If the Examiner wishes to have copies of the co-pending applications, Examiner should contact the Attorney of record. Applicants respectfully request that the Examiner consider these listed documents and indicate that each was considered by making appropriate notations on this Information Disclosure Statement.

Examiner Initials	Our docket no.	S.N.	Title	Filing Date	Status	Document Enclosed
	IPT-064.01	10/407,028	Methods of Agonizing and Antagonizing Fab K	4 April 2003	Pending	no
	IPT-060.01	08/790,043	Polynucleotide Encoding The Enoyl-Acyl Carrier Protein Reductase of Staphylococcus Aureus, Fab I (as Amended)	28 January 1997	pending	no
	IPT-060.02	09/292,411	Fab I	15 April 1999	pending	no
	IPT-060.03	09/292,412	Polynucleotides Encoding Staphyloccal Fab I Enoyl- Acp Reductase (as Amended)	15 April 1999 13 August 2002	Issued: U.S. Pat. 6,432,670	yes
	IPT-062.01	10/089,019	Methods for Making and Using Fatty Acid Synthesis Pathway Reagents	26 October 2000	pending	no
Date Consid	l dered:		Examiner	r's Name:	1	1

Applicants have listed dates of publication on the attached Form PTO-1449 for the cited documents based on information presently available to the undersigned. However, the listed

20/567132.1 - 2 -

publication dates should not be construed that the information in the cited documents was actually published or otherwise publicly available on the date indicated.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached Form PTO-1449.

This submission does not represent that a search has been made or that no better art exists. Nor does it constitute an admission that each or all of the listed documents are material or constitute "prior art." Further, if the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents. Moreover, the Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Although we believe that we have provided for the fee due in connection with this submission, the Commissioner is authorized to credit any overpayment or charge any deficiencies to/from our **Deposit Order Account No. 06-1448**.

Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at (617) 832-1000.

Respectfully submitted,

FOLEY HOAG LLP

Jennifer K. Hølmes J Reg. No. 46,778 Agent for Applicants

y yplanes

Dated: October 29, 2003 *Customer No.: 25181*

Patent Group Foley Hoag LLP 155 Seaport Boulevard Boston, MA 02210-2600 Telephone: (617) 832-1000 Facsimile: (617) 832-7000

20/567132.1 - 3 -

Sheet Page 1 of 3 Form PYO-1449 Docket Number (Optional) Application Number IPT-061.01 INFORMATION DISCLOSURE CITATION Applicant IN AN APPLICATION DeWolfe et al. (Use several sheets if necessary) Filing Date Group Art Unit November 7, 2001 1652 U.S. PATENT DOCUMENTS **EXAMINER** FILING DATE DOCUMENT NUMBER DATE CLASS **SUBCLASS** INITIAL NAME IF APPROPRIATE BA 5, 539, 132 07.23.96 Royer et al. BB5,614,551 Dick et al. 03.25.97 BC 5,759,837 06.02.98 Kuhajda et al. BD 5,965,402 10.12.99 Black et al. BE 6,228,619 05.08.01 Foster et al. BFBlack et al. 6,274,376 08.14.01 BG 6,380,370 04.30.02 Doucette-Stamm et al. BH6,403,337 06.11.02 Bailey et al. ВΙ 6,432,670 08.13.02 Payne et al. BJUS 2002/0076766 06.20.02 Black et al. BK 6,593,114 07.15.03 Kunsch et al. FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY **CLASS SUBCLASS** YES NO CA DE 26 20 777 12.01.77 Germany CB JP 10-174590 06.30.98 Japan 0 826 774 A2 CC 04.03.98 FPO CD 0 78 6519 A2 07.30.97 **EPO** CE WO 97/30070 08.21.97 **PCT** CF WO 97/30149 08.21.97 **PCT** OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages Etc.)

Bergler et al., "Protein EnvM is the NADH-dependent Enoyl-ACP Reductase (Fabl) of Escherichia coli*", The Journal of Biological Chemistry, FA Vol. 269, No. 8, pp 5493-5496 (1994). Bergler et al., "Sequences of the envM gene and of two mutated alleles in Escherichia coli", Journal of General Microbiology (1992), 138, pp. FB 2093-2100. Broadwater et al., "Spinach Holo-Acyl Carrier Protein: Overproduction and Phosphopantetheinylation in Escherichia coli BL21(DE3), in Vitro FC Acylation, and Enzymatic Desaturation of Histidine-Tagged Isoform I¹⁷, Protein Expression and Purification 15, 314-326 (1999). EXAMINER DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in

conformance and not considered. Include copy of this form with next communication to the applicant.

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Sheet Page 2 of 3

Form PYO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)			Docket Number (Optional) IPT-061.01			Application Number 10/009,219				
			Applicant DeWolfe et al.							
				g Date rember 7, 2001	Group 1652	Group Art Unit 1652				
				U.	.S. PATENT DOCUMENTS					
EXAMINER INITIAL	D	OCUMENT NUMBER	DATE	TE NAME		CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
	,		F	ORI	EIGN PATENT DOCUMENT	S	T			
	D	OCUMENT NUMBER	DATE	Ξ	COUNTRY	CLASS	SUBCLASS	Translati YES	on NO	
	CG	WO 00/70017	11.23.0	00	PCT					
	СН	WO 01/30988	05.03.0	01	PCT					
	Cl	WO 01/48248	07.05.0)1	PCT					
	Cl	WO 02/31128	04.18.0)2	PCT					
	1	ОТН	ER DO	CUM	IENTS	(Including Autho	r, Title, Date, Pert	inent Pages Etc	:. <i>)</i>	
	FD	Edwards, et al., "Cloning of the fabF gene in an expression vector and in vitro characterization of recombinant fabF and fabB encoded enzymes from Escherichia coli", FEBS Letters, 402:62-66 (1997).								
	FE	Grassberger et al., "Preparation and Antibacterial Activates of New 1,2,3-Diazaborine Derivatives and Analogues", Journal of Medicinal Chemistry, 1984. Vol. 24, No. 8, pp. 947-953.								
	FF	Gronowitz et al., "Antibacterial borazaro derivatives", Acta Pharm. Suecica 8, pp. 377-390 (1971).								
	FG	Heath et al., "Enoyl-Acyl Carrier Protein Reductase (fabl) Plays a Determinant Role in Completing Cycles of Fatty Acid Elongation in Escherichia coli*", The Journal of Biological Chemistry, Vol. 270, No. 44, pp. 26538-26542 (1995).								
	FH	Heath et al., "Regulation of Fatty Acid Elongation and Initiation by Acyl-Acyl Carrier Protein in Escherichia coli*", The Journal of Biological Chemistry, Vol. 271, No. 4, pp 1833-1836 (1996).								
	FI	Lam et al., "Effect of diazaborine derivative (Sa 84.474) on the virulence of <i>Escherichia coli</i> ", Journal of Antimicrobial Chemotherapy (1987) 20, pp. 37-45.								
	FJ	Lambalot, et al., "Cloning, Over production, and Characterization of the Escherichia coli Holo-acyl Carrier Protein Synthase*", The Journal of Biological Chemistry, Vol. 270, No. 42, pp. 24658-24661 (1995).								
	FK	Ngo et al., "Computational complexity, protein structure prediction, and the Levinthal paradox", Chapter 14 in 'The Protein Folding Problem and Tertiary Structure Prediction', Merz et al. (eds.), Birkhauser: Boston, MA, pp. 433 & 492-495.								
	Rock et al., "Preparative Enzymatic Synthesis and Hydrophobic Chromatography of Acyl-Acyl Carrier Protein", <i>The Journal of Biological Chemistry</i> , 254(15): 7123-7128 (1979).									
EXAMINER					DATE CONSIL	DERED		_		
EXAMINER:	Initis	al if citation considered w	hether o	r not	citation is in conformance with MPEP §	609. Draw line	through citation	if not in		
					with next communication to the applic		0 0 0 0			

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Sheet	Page	3	of	
-------	------	---	----	--

Form PYO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)			ON	Docket Number (Optional) IPT-061.01		Application Number 10/009,219				
				Applicant DeWolfe et al.						
•				Filing Date November 7, 2001	Group 1652	Group Art Unit 1652				
				U.S. PATENT DOCUMENTS		· · · · · · · · · · · · · · · · · · ·				
EXAMINER INITIAL				NAME	CLASS	SUBCLASS		FILING DATE IF APPROPRIATE		
			 -							
<u>-</u>			T74	ODDION DATENT DOCUMENT	TO					
		OCHMENE MUNDED		OREIGN PATENT DOCUMEN'		ASS SUBCLASS Translation				
	l)	OCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO		
		OTHER	DOC	UMENTS	(Including Autho	r, Title, Date, Pert	inent Pages Etc.)		
	FM	1 Rock et al., "Acyl Carrier Protein from Escherichia coli", Methods in Enzymology, 71:341-351 (1981).								
	FN	Roujeinkova et al., "Inhibitor Binding Studies on Enoyl Reductase Reveal Conformational Changes Related to Substrate Recognition", <i>The Journal of Biological Chemistry</i> , 274(43): 30811-30817 (1999).								
	FO	Turnowsky et al., "envM genes of Salmonella typhimurium and Escherichia coli", Journal of Bacteriology, Dec. 1989 pp. 6555-6565.								
	FP	Ward et al., "Kinetic and Structural Characteristics of the Inhibition of Enoyl (Acyl Carrier Protein) Reductase by Triclosan", Biochemistry, 38: 12514-12525 (1999).								
				·						
EXAMINER				DATE CONS	SIDERED					
, , , , , , , , , , , , , , , , , , ,				3.11866.16						
				not citation is in conformance with MPEF form with next communication to the appl		through citation	if not in			

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE